

NON-PUBLIC?: N
ACCESSION #: 9211160303
LICENSEE EVENT REPORT (LER)

FACILITY NAME: Beaver Valley Power Station Unit 1 PAGE: 1 OF 03

DOCKET NUMBER: 05000334

TITLE: Reactor Trip Due to Reactor Coolant Pump Trip On Ground Fault
Indication

EVENT DATE: 10/09/92 LER #: 92-009-00 REPORT DATE: 11/09/92

OTHER FACILITIES INVOLVED: N/A DOCKET NO: 05000

OPERATING MODE: 1 POWER LEVEL: 090

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR
SECTION:

50.73(a)(2)(iv)

LICENSEE CONTACT FOR THIS LER:

NAME: T. P. Noonan, General Manager TELEPHONE: (412) 643-1258
Nuclear Operations

COMPONENT FAILURE DESCRIPTION:

CAUSE: X SYSTEM: AB COMPONENT: MO MANUFACTURER: W120
REPORTABLE NPRDS: Y

SUPPLEMENTAL REPORT EXPECTED: No

ABSTRACT:

On 10/09/92, Unit 1 was operating at Power Operation at 90 percent reactor power. At 1654 hours, the 1A reactor coolant pump (RC-P-1A) tripped on an indicated electrical ground fault. The trip of RC-P-1A generated a one of three reactor coolant pump low flow reactor trip. The reactor trip signal generated a turbine trip signal. operations personnel performed the Emergency operating Procedures and stabilized the plant in Hot Shutdown at 1709 hours. Auxiliary Feedwater initiated as expected due to the low-low steam generator levels following the reactor trip. At 1822 hours, the Nuclear Regulatory Commission was notified of the event using the Emergency Notification System. The cause of the trip was a failed top coil in the stator for RC-P-1A. The plant was placed in Cold Shutdown and the stator for RC-P-1A was removed and repaired. There were no safety implications as a result of this event. The reactor trip signal actuated as designed on a low flow condition in one reactor

coolant loop. Auxiliary feedwater actuated as designed and expected on the low steam generator levels following the reactor trip.

END OF ABSTRACT

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DESCRIPTION OF EVENT

On 10/09/92, Unit 1 was operating at Power Operation (Operating Mode 1) at 90 percent reactor power. At 1654 hours, the 1A reactor coolant pump (RC-P-1A) tripped on an indicated electrical ground fault, due to activation of relay 50-VA-105G (Ground Fault). The trip of RC-P-1A generated a one of three (1/3) reactor coolant pump low flow reactor trip. The reactor trip signal generated a turbine trip signal, as reactor power was above the P-9 permissive of 49 percent. A Safety Injection (SI) signal was not generated and none was expected based on plant parameters. Operations personnel performed the Emergency Operating Procedures and stabilized the plant in Hot Shutdown at 1709 hours. Auxiliary Feedwater initiated as expected due to the low-low steam generator levels following the reactor trip.

CAUSE OF THE EVENT

The cause of the trip was a failed top coil in the stator for the 1A reactor coolant pump, RC-P-1A. This caused the ground in the motor, which was sensed by the ground fault relay. The pump is a Westinghouse Model 93A reactor coolant pump. The pump had been in continuous operation for 317 days prior to the trip. A review of pump parameters including vibration, temperature and bus voltages, showed no indication of pump degradation, nor could the pump vendor identify any material deficiencies which would have caused the fault.

CORRECTIVE ACTIONS

The following corrective actions have been taken as a result of this event:

1. Operations personnel utilized the Emergency Operating Procedures to stabilize the plant in Hot Shutdown (Operating Mode 3), at 1709 hours.
2. A plant cooldown to Cold Shutdown (Operating Mode 5) was initiated at 0923 hours on 10/10/92.
3. The 1A reactor coolant pump motor was uncoupled from the pump

and sent offsite for investigation and repair.

4. The failed outer winding on the 1A reactor coolant pump was replaced and the motor was reassembled on the pump on 10/20/92.

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5. The 1A reactor coolant pump was satisfactorily tested on 10/29/92 and returned to operable status.

REPORTABILITY

This event was reported to the Nuclear Regulatory Commission at 1822 hours on 10/09/92 in accordance with 10CFR50.72.b.2.ii, as an event involving a Reactor Protection System (RPS) and Engineered Safety Features (ESF) actuation. This written report is being submitted in accordance with 10CFR50.73.a.2.iv.

SAFETY IMPLICATIONS

There were no safety implications as a result of this event. The reactor trip signal actuated as designed on a low flow condition in one reactor coolant loop after actuation of the ground fault protection relay for the 1A reactor coolant pump. Auxiliary feedwater actuated as designed and expected on the low steam generator levels resulting from the level "shrink" following the reactor trip.

PREVIOUS SIMILAR EVENTS

This is the first reported event of this type involving a reactor coolant pump.

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November 9, 1992
ND3MNO:3373

Beaver Valley Power Station, Unit No. 1
Docket No. 50-334, Licensee No. DPR-66
LER 92-009-00

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Gentlemen:

In accordance with Appendix A, Beaver Valley Technical
Specifications, the following Licensee Event Report is submitted:

LER 92-009-00, 10 CFR 50.73.a.2.iv, "Reactor Trip Due to Reactor
Coolant Pump Trip on Ground Fault Indication.

Very truly yours,

T. P. Noonan
General Manager
Nuclear Operations

JGT/sl

Attachment

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